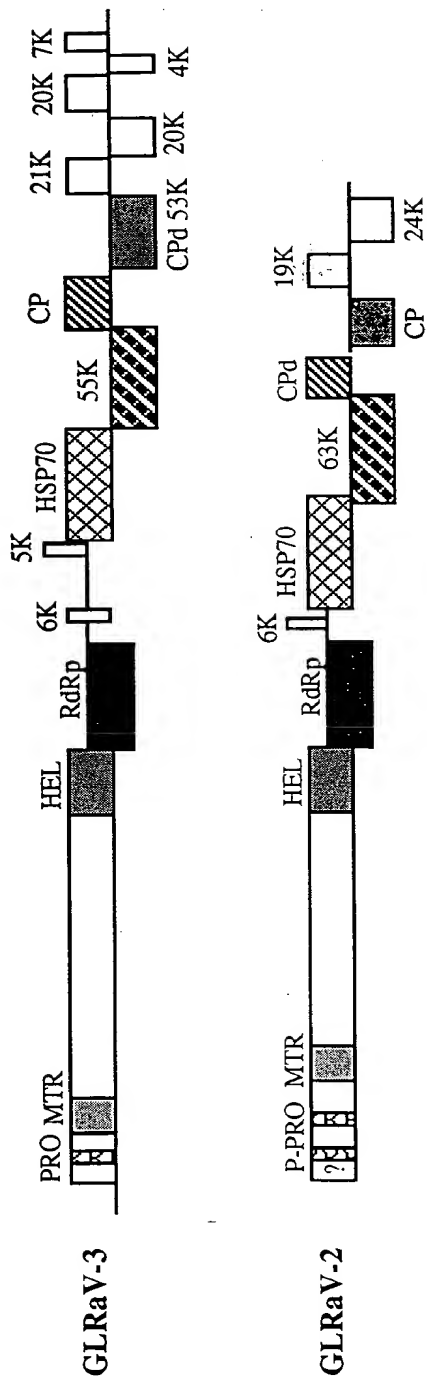


Figure 1



[illegible]

Figure 2-cont.

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Figure 2-cont.

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Figure 2-cont.

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Figure 2-cont.

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Figure 2-cont.

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Figure 2-cont.

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Figure 2-cont.

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Figure 2-cont.

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Figure 2-cont.

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Figure 2-cont.

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Figure 3

```
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Figure 4

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Figure 4-cont.

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Figure 4-cont.

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Figure 4-cont.

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Figure 5

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Figure 6

VSGSVSALRG	DGKKVLMEAR	TSTSATSDVS	DFDVFEAVS	NALLVVHYHR	50
VVPYAPVKRE	QPKPAVKQDE	QKPKRQASHW	AVKPTAVGVH	VPLPKKQEAL	100
EPAQSVPQQS	LEEKAALTFG				120

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Figure 7

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Figure 8

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VKREGDYLAY	NVGQCGEMYE	HSFSNVSGFF	TFSYVRTSSG	NVFKLEYEGY	RCGYHHLTMC	240
RAQKSPGTEV	TYRSLVPSFV	GKSLVFIPVV	AG			272

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Figure 9

Consensus#1P.....F.....S.H.....R.....N.....D.GG.....H.C.P..D..D..R.....	MT I	MT Ia	MT II
GLRaV2-MTR	MSEATQNSLTRFYPOELKFSHSHSDHPAAAASRLLENETIVRLCGNS-VSDIGGCPFLFHLHKTQRRVHVCRPVLGKDAQRRVVRDLQY			
BYV-MTR	MGEAVQSGLTRAYPQNLSTHVSYSHPAAAGSRLLENETIASMAKSS-FSDIGGCPFLFIK-RGSTDYHVCRIYIDMKDAQRRVSRLEQA			
LIIV-MTR	LSMDEKMITNLFPDIQMSFNQKSYNSHGVFNAMRACENFVPSRKFNSDYIDAGDVVSTLRSK-NHNVHICSPRLDLKDAARHIQKATVI			
CTV-MTR	MSENQQVMLTRAYPEFINFIHVSHPVFAAGSRALENHLVRKHAGTD-YSDVGGCPFLHRA-GHSGVHVCRPVYDVKDAHRRVVRHQL			
LCV-MTR	LSTROKIVCDLFPHLKFEKETQSSHPVFNVRVTVSNFVLYKMOGRHFVDFGNIGTVINSE-CDDVHICNPVADSRDAKRHVDNGLFL			
GLRaV3-MTR	LKPREREKLELPELSIQFSDSVSRSSHPFANMRSCENGIFSRRCGNVCFDIDGGSFTYHVKAG-HVNCHVCNPVLGVKDKRRINEILFL			
Consensus#1C.....C.....V.VVD.....AM.....P.....	MT Iia	MT Iii	
GLRaV2-MTR	SNVRLG-DDD--KILEGPRN-IDICHYPLGACDHESSAMMMQVYDASLYEICGAMIKKSRITYLTMVTPGEFLDGRECVVMESLDCEIEV			
BYV-MTR	RGLENLSRE--OLVEAQR-VSVCPTHGNCNWKSDVLMQVYDASLYEICGAMIKKSRITYLTMVTPGEFLDGRECVVMESLDCEIEV			
LIIV-MTR	DGLG-----YGETISFCTNKTEDCAVNRDIIIAVEVYDMLRDKAKAMLSHGRKFEFCIIPELFTKECNVELYEGRLKV--			
CTV-MTR	SKVSLDQSDGVKQVGTWNT-NSVCGNIGCEYHASEAMMMQVYDVPRLRELGRAMINKTSVCYMTMVTGPELDDARESFFIKDLDCSVEL			
LCV-MTR	AKSVG-----VSNNISVCNKLQHCNHSKSDRAVWVEVYDMLTLMCQAMLAHGTIRLDFILLPGDLLEDFTITIFDGGCKI--			
GLRaV3-MTR	STAGGDSYVSSDLLTEAASKSVSYCSRESQNCDSRADAGFMVDYDISPQOVAEAMDKKCALVPDIALMFPVELLYNGEVEYLEELDTLV--			
Consensus#1D...Y.....H.....G..F.....	MT IV		
GLRaV2-MTR	DVHADVVMYKFGSSC--YSHKLSIIKIDIMTTPYLTIG-GFLFSVEMYEVRMGVNYFKITKSEVSPSISCTKLRYRRANSDVVKVKLPRFD			
BYV-MTR	DTRDMVQYKFGSSC--YCHKLSNIKSIMLTPTAFTFS-GNLFSEVEMYENRMGVNYFKITRSAYSPEIRGVKTLRYRRACTEVVQVKLPRFD			
LIIV-MTR	TRIGDNVEYVYGGNGETFHSCQTLKDLISVQVQFQF-GRVFKRTLEHSGQLHFFSICICEKIEPFGSVKLTYYQYQSELDKVTLRIPVKD			
CTV-MTR	DPIADRVVYCFNNSA--YHTYSTICECMTPTCLVVD-GFLTIEVMVSLRCSVNYCYCTKSSVCPRISSETKRLRYRRCDSDLRIRIKIPRYS			
GLRaV3-MTR	TKDDDKVYYYGGDAAEAYTHDLNNLRNIMTDNLVCVD-GTAFKKTLETSPFRHFSLTKLETSPSGKIEFLTMVDKCEKNMMLVKVPMRN			
	KREGDYLA NVGQCCEMYEHSFNSVSGFTTFSYVRTSSGNVFKLEYEGYRCGYHHLTMCRAQKSPGTEVTYRSLVPSFVGKSLVFI PVVAG			

Figure 10

gtgggcgaat	cgtttaagtc	cttcgaatat	aagtgcctata	atgctcccc	aggtggcggc	60
aagacgacga	cgttagtggg	cgaattcggt	aagtcaccca	atagcacagc	caccattacg	120
gctaattgtg	gaagttctga	ggacataaat	atggcgggtg	agaagagaga	tccgaatttg	180
gaaggtctca	acagtgcctac	cacagttaac	tccaggggtg	taaactttat	cgtcagggga	240
atgtataaaa	gggttttggt	ggatgaggtg	cacatgatgc	atcaaggctt	actacaacta	300
ggcgtcttcg	caaccggcgc	gtcgggaaggc	ctcttttttg	gagacataaa	tcagatacca	360
ttcataaaca	gggagaaggt	gtttaggatg	gattgtgctg	tttttggtcc	aaagaaggaa	420
agcgttgat	acacttctaa	atcgtacagg	tgtccggttag	atgtttgcta	cttgttggtcc	480
tcaatgaccg	taaggggaac	ggaaaagtgt	taccctgaaa	aggtcggttag	cggttaaggac	540
aaaccagtag	taagatcgct	gtccaaaagg	ccaattggaa	ccactgatga	cgtagctgaa	600
ataaacgctg	acgtgtactt	gtgcatgacc	cagttggaga	agtcggatat	gaagaggtcg	660
ttgaaggga	aaggaaaaga	aacaccagtg	atgacagtgc	atgaagcaca	gggaaaaaca	720
ttcagtgatg	tggtattggt	taggacgaag	aaagccgatg	actccctatt	cactaaacaa	780
ccgcatatac	ttgttggttt	gtcgagacac	acacgctcac	tggtttatgc	cgctctgagc	840
tcaaagttgg	acgataaggt	cggcacatat	att			873

Figure 11

VGESFKSFY	KCYNAPPGG	KTTTLVDEFV	KSPNSTATIT	ANVGSSSEDIN	MAVKKRDPNL	60
EGLNSATTVN	SRVNFIVRG	MYKRVLVDEV	HMMHQGLLQL	GVFATGASEG	LFFGDINQIP	120
FINREKVFRM	DCAVFVPKKE	SVVYTSKSYR	CPLDVCYLLS	SMTVRGTEKC	YPEKVVSGKD	180
KPVVRSLSKR	PIGTTDDVAE	INADVLCMT	QLEKSDMKRS	LKGKGKETPV	MTVHEAQGKT	240
FSDVVLFRTK	KADDSLFTKQ	PHILVGLSRH	TRSLVYAALS	SKLDDKVGTY	I	291

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Figure 12

atgaattttg	gaccgacctt	cgaaggggag	ttggtacgga	agataccaac	aagtcatttt	60
gtagccgtga	atgggtttct	cgaggactta	ctcgacgggt	gtccggcttt	cgactatgac	120
ttctttgagg	atgatttcga	aacttcagat	cagtctttcc	tcatagaaga	tgtgcgcatt	180
tctgaatctt	tttctcattt	tacgtcgaaa	atagaggata	ggttttacag	ttttattagg	240
tctagcgtag	gtttaccaa	gcgcaacacc	ttgaagtgt	acctcgtcac	gtttgaaaat	300
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cggcaatact	acacctatga	actggatatc	agtaagtacg	acaaatctca	gagtgtctct	840
atgaagcagg	tggaggagtt	gatactcttg	acacttggtg	ttgatagaga	agttttgtct	900
actttctttt	gtggtgagta	tgatagcgtc	gtgagaacga	tgacgaagga	attggtgttg	960
tctgtcggct	ctcagaggcg	cagtgggtgt	gctaacacgt	ggttgggaaa	tagtttagtc	1020
ttgtgcacct	tgttgctcgt	agtacttagg	ggattagatt	atagttatat	tgtagtttagc	1080
ggtgatgata	gccttatatt	tagtcggcag	ccgttggata	ttgatacgtc	ggttctgagc	1140
gataattttg	gttttgacgt	aaagattttt	aaccaagctg	ctccatattt	ttgttctaag	1200
tttttagttc	aagtcgagga	tagtctcttt	tttgttcccg	atccacttaa	actcttcggt	1260
aagtttgagg	cttccaaaac	ttcagatatc	gaccttttac	atgagatttt	tcaatctttc	1320
gtcgatcttt	cgaagggttt	caatagagag	gacgtcatcc	aggaatttagc	taagctgggtg	1380
acgcggaaat	ataagcattc	gggatggacc	tactcggctt	tgtgtgtctt	gcacgtttta	1440
agtgcaaatt	tttcgcagtt	ctgtagggtta	tattaccaca	atagcgtgaa	tctcgatgtg	1500
cgccctattc	agaggaccga	gtcgctttcc	ttgtctggct	tgaaggcaag	aattttaagg	1560
tggaaagctt	ctcgttttgc	cttttcgata	aagaggggt			1599

Figure 13

MNFGPTFEGE	LVRKIPTSHF	VAVNGFLEDL	LDGCPAFDYD	FFEDDFETSD	QSFLIEDVRI	60
SESFHFTSK	IEDRFYSFIR	SSVGLPKRNT	LKCNLVTFEN	RNFNADRCN	VGCDSDVAHE	120
LKEIFFEEV	NKARLAEVTE	SHLSSNTMLL	SDWLDKRAPN	AYKSLKRALG	SFVFHPSMLT	180
SYTLMVKADV	KPKLDNTPLS	KYVTGQNIVY	HDRCVTALFS	CIFTACVERL	KYVVDERWLF	240
YHGMDTAELA	AALRNNLGDI	RQYYTYELDI	SKYDKSQSAL	MKQVEELILL	TLGVDREVLS	300
TFFCGEYDSV	VRTMTKELVL	SVGSQRRSGG	ANTWLGNSLV	LCTLLSVVLR	GLDYSYIVVS	360
GDDSLIFSRQ	PLDIDTSVLS	DNFGFDVKIF	NQAAPYFCSK	FLVQVEDSLF	FVPDPLKLFV	420
KFGASKTSDI	DLLHEIFQSF	VDLSKGFNRE	DVIQELAKLV	TRKYKHSGWT	YSALCVLHVL	480
SANFSQFCRL	YYHNSVNLDV	RPIQRTESLS	LLALKARILR	WKASRFAFSI	KRG	533

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Figure 14

atggttatggt gttcagccag tgtcaaattt tcaaacgggt tacaattatc gctacttatt 60
tgcgcatggt tgtagcggt gctaattggt agcttttgta gaaggcgatg a 111

09301906-042990
666240-90610E60

Figure 15

MLCCSASVKF SNGLQLSLLI CACLLAVLIV SFCRRR

36

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Figure 16

MDYIRPLRVF	SFPHVNTLE	YVRYNKANGD	VGAFLLTMMKF	IGNVKLSDFD	PRCAAMIYIG	60
KLTKGVKRTF	VPPPVKGFAR	QYAVVSGSVS	ALRGDGKKVL	MEARTSTSAT	SDVSDFDVVF	120
EAVSNALLVV	HYHRVVPYAP	VKREQPKPAV	KQDEQKPKRQ	ASHWAVKPTA	VGHVPLPKK	180
QEALEPAQSV	PQOSLEEKAA	LTFLGLFFSKG	GGDESDAVIL	RKGKLFNRAL	NVPIDVKNTF	240
VWAKIWDEAS	RRRGYFYVKD	RAVKFFPIVR	GRATIEDFIV	NTAPGCDVAL	PRIELWSMRE	300
RAFVCTTKGW	CWFNNERLRG	EIYRRRCFSS	SFSIGFLMHL	GFRSLKVIRF	AGTNILHMPS	360
LNEERTFGWK	GGDVYLPNVP	KTAIVAGDRT	RLGGEILASV	ANALNQEEVY	SSVSSITNR	420
LVLRDQSALL	SHLDTKLCDM	FSQRDAMIRE	KPSHRCDVFL	KPREREKLRE	LFPELSIQFS	480
DSVRSSHPPA	NAMRSCFNIG	FSRRCGNVCF	FDIGGSFTYH	VKAGHVNVCHV	CNPVLDVKDV	540
KRRINEILFL	STAGGDSYVS	SDLLTEAASK	SVSYCSRESQ	NCDSRADAGF	MVDVYDISPQ	600
QVAEAMDKKG	ALVFDIALMF	PVELLYGNGE	VYLEELDTLV	KREGDYLAYN	VGQCGEMYEH	660
SFSNVSGFFT	FSYVRTSSGN	VFKLEYEGYR	CGYHHLTMCR	AQKSPGTEVT	YRSLVPSFVG	720
KSLVFIPVVA	GSSVSFKTIV	LDSDFVDRIY	SYALNTIGTF	ENRTFEYAVG	AVRSQKTHVI	780
TGSRVVHSHV	DISPDDMWGL	VVAVMAQAIK	DRAKSIRSYN	FIKASEGSLA	GVFKLFFQTV	840
GDCFSNAVSV	YAKAMVHDNF	NVLETLMSP	RAFIRKVPGS	VVVTICTSGA	SDRLELRGAF	900
DISKETFGRK	LKNSRLRVFS	RAIVEDSIKV	MKAMKTEDGK	PLPITEDSVY	AFIMGNVSNV	960
HCTRAGLLGG	SKATVVSSVS	KGLVARGAAT	KAFSGITSFF	STGSLFYDRG	LTEDERLDAL	1020
VRTENAINSP	VGILETSRVA	VSKVVAGTKE	FWSEVSLNDF	TTFVLRNKVL	IGIFVASLGA	1080
APIAWKYRRG	IAANARRYAG	SSYETLSSLS	SQAAGGLRGL	TSSTVSGGSL	VVRRGFSSAV	1140
TVTRATVAKR	QVPLALLSFS	TSYAISGCSM	LGIWAHALPR	HLMFFFGGLT	LLGARASANT	1200
WKFGGFSNNW	CAVPEVVWRG	KSVSSLLLP	TLGVSLIIRG	LLNDTIPQLA	YVPPVEGRNV	1260
YDETLRYRD	FDYDEGAGPS	GTQHEAVPGD	DNDGSTSSVS	SYDVVTNVRD	VGISTNGEVT	1320
GEEETHSPRS	VQYTYVEEEV	APSAAVAERQ	GDPSGSGTAD	AMAFVESVKK	GVDDVFHQQS	1380
SGETAREVEV	DGKGLLPESV	VGEAPTQERG	RAADGNTAQT	AVNEGDRREP	QSSLVSSPQA	1440
DIPKVTQSEV	HAQKEVKQEV	PLATVSGATP	IVDEKPAPSV	TTRGVKIIDK	GKAVAHVAEK	1500
KQVQVEQPKQ	RSLTINEGKA	GKQLCMFRTC	SCGVQLDVYN	EATIAFRFSN	AFTFVDNLKG	1560
RSVFFSKLG	EGYTYNGGSH	VSSGWPRALE	DILTAIKYPS	VFDHCLVQKY	KMGGGVPFHA	1620
DDEECYPSDN	PILTVNLVVK	ANFSTKCRKG	GKVMVINVAS	GDYFLMPCGF	QRTHLHSVNS	1680
IDEGRISLTF	RATRRVFGVG	RMLQLAGGVS	DEKSPGVPNQ	QPQSQGATRT	ITPKSGGKAL	1740
SESGGREVKG	RSTYSIWCEQ	DYVRKCEWLR	ADNPVMALEP	DYTPMTFEVV	KTGTSEDAVV	1800
EYLKYLAIGI	ERTYRALLMA	RNIAVTTAEG	VLKVPNQVYE	SLPGFHVYKS	GTDLIFHSTQ	1860
DGLRVRLDPY	VLIAEKGIFT	KGKDVDVAVV	LGDNLFCDD	ILVFHDAINL	IGALKVARCG	1920
MVGESFKSFE	YKCYNAPPGG	GKTTTLVDEF	VKSPNSTATI	TANVGSSEDI	NMAVKKRDPN	1980
LEGLNSATTV	NSRVVNFIVR	GMVKRVLVDE	VHMMHQGLLQ	LGVFATGASE	GLFFGDINQI	2040
PFINREKVFR	MDCAVFVPPK	ESVYTSKSY	RCPLDVCYLL	SSMTVRGTEK	CYPEKVVSGK	2100
DKPVVRSLSK	RPIGTTDDVA	EINADVLCM	TQLEKSDMKR	SLKGKGKETP	VMTVHEAQGK	2160
TFSDVVLFRF	KKADDSLFTK	QPHILVGLSR	HTRSLVYAAL	SSKLDDKVG	YISDASPQSV	2220
SDALLHTFAP	AGCFRGI					2237

Figure 17

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aaaaatcctt caataaatTT gaaataaaca aaagtaagaa aaatgaaata attaggctag 60
tctttttggt cgtctttcgc tttttagaaa taggttttat ttcgaggtaa gatgactaaa 120
ctttacctca cggtttaata ctctgatatt tgtaaaatta gtccgtaaag tcgatagtga 180
tattatatta gtatagtata ataaacgcca aaatccaatt aaagtttggg acctaggcgg 240
gcctcttacg aggctaactt atcgacaata agttaggtc 279
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